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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/758,820

Applicant(s)

HAUGHAWOUT ET AL.

Examiner

Clara Yang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 January 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claims 3, 4, 17, 18, 27, 29, 31, 32, and 41 are objected to because of the following informalities:

- Claims 3, 4, 17, 18, 31, and 32: Change “effects” to “affects” since the definition of “affect” is “to produce an effect upon” (see the 10th edition of the *Merriam-Webster Collegiate Dictionary*).
- Claim 27: Change “wherein signal” to “wherein the signal”.
- Claims 29 and 41: In claim 29, the applicant calls for a control device “receiving from the power monitor via the second wireless communication module a signal which indicates that the transmitted command code caused a change in the current power state of the appliance” (see lines 11-13). It is understood that (1) the power monitor’s first wireless communication module transmits the current power state signal to the control device since the power monitor determines the appliance’s current power state, and (2) the second wireless communication module transmits commands to appliances (see lines 6-8) and receives current power state signals from a power monitor. In claim 41, however, the applicant calls for the control device to have a third wireless communication module for “receiving the communication from the first wireless communication module of the power monitor.” The specification does support the embodiment of the control device having a transmission circuit 32 (i.e., second wireless communication module) for sending signals to a controlled appliance and a communications module 40 (i.e., third wireless communication) for sending and/or receiving signals from the power monitor (see page 8, lines 19-23 and page 9, line 1). The applicant also discloses that transmission circuit 32 and communications module 40 could be performed by a single device (see page 9, lines 3-6) but fails to expressly suggest the combination of both embodiments. Therefore, the examiner interprets the third limitation of claim 29 to call for a control device’s setup mode programming for “transmitting data indicative of a command code from one of the command code sets via the second wireless communication module and for receiving from the power monitor a signal which indicates that the transmitted command code caused a change in the current power state of the appliance...”

Appropriate correction is required.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or

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improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1-3, 5-17, 19-31, and 33-43 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 10, 12, and 13 of U.S. Patent No. 6,642,852 in view of Kamon et al. (US 5,726,645).

Referring to claims 1 and 29, US 6,642,852 claims a remote control system. The patentee claims the first limitation of both claims (i.e., a power monitor) in Col. 12, lines 15-18 and the second limitation (a control device having a library of command code sets) in Col. 12, lines 19-24. Though the patentee fails to expressly teach that the control device has a setup mode, the patentee claims in Col. 12, lines 25-29, that the control device accepts input to associate commands with each of a plurality of appliances and to associate a power monitor with at least one of the appliances. In addition, in Col. 12, lines 39-65, the patentee claims that in response to activation of a predetermined key, the control device automatically performs the following

steps: (1) determine if the appliance is responsive to discrete power commands or power toggle commands; (2) selecting the discrete power commands to which the appliance is adapted to respond to enter the desired power state if the appliance is responsive to discrete power commands; and (3) selecting the power toggle command to which the appliance is adapted to respond to change power states if the appliance is response to toggle power commands. It is understood that activation of the predetermined key causes the control device to enter a setup mode, which enables the control device to determine if the appliance is responsive to discrete power commands or power toggle commands. Regarding claim 15 and the third limitation of claims 1 and 29, the patentee, however, is silent on how the control device determines if the appliance is responsive to discrete power commands or power toggle commands.

In an analogous art, Kamon teaches a remote control system, as shown in Fig. 6, comprising: (a) operation detecting circuit 10 (i.e., a power monitor) associated with appliance 20, wherein operation detecting circuit 10 has circuitry for determining appliance 20's current power state and transmission portion 10b (i.e., first wireless communication module) for transmitting information to a remote controller (see Col. 4, lines 65-67 and Col. 5, lines 1-3 and 9-22); (b) a remote controller having (1) preset data of command codes (i.e., library of command code sets) employing various formats and code systems associated with respective electronic devices categorized according to the manufacturers and types thereof, (2) light emitting portion 1 (i.e., a second wireless communication module) for transmitting a command code to appliance 20, and (3) receiving portion 11 (i.e., a third wireless communication module) for receiving a signal from operation detecting circuit 10 (see Figs. 4 and 5; Col. 3, lines 42-47; Col. 4, lines 34-54 and 65-67; and Col. 5, lines 1-3 and 37-40); and (c) wherein the remote controller has setup mode programming (see Fig. 7) that includes the steps of (1) light emitting portion 1 transmitting a

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command code to appliance 20 at S104, (2) receiving portion 11 receiving a signal from operation detecting circuit 10 that indicates that the transmitted command code caused a change in appliance 20's current power state at S105, and (3) control portion 4 selecting and storing the command code set that includes the command code to which appliance 20 responded by changing power state at S109 (see Col. 5, lines 37-40; Col. 6, lines 36-67; and Col. 7, lines 39-47), as called for in the third limitation of claims 1 and 29 and in steps (a)-(c) of claim 15. Kamon adds that in response to an absence of a signal from operation detecting circuit 10, the remote controller transmits a command code selected from the next command signal group, if any, and repeating steps (2)-(3) (see Fig. 7, S106, S107, and S108; Col. 6, lines 3-13 and 59-67; and Col. 7, lines 1-20 and 29-38), as called for in step (d) of claim 15.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system claimed in US 6,642,852 as taught by Kamon because a remote controller that has Kamon's setup mode programming allows a user to select and set a preset command code group with a minimum number of simple key strokes without the hassle of monitoring constantly the appliance's power state and checking the appliance's manufacturer and model (see Kamon, Col. 2, lines 31-46).

Regarding claims 2, 16, and 30, though the patentee omits expressly claiming that the power monitor's signal contains its address in addition to its associated appliance's current power state, the patentee does claim in Col. 12, lines 14-18 and 30-34, that each power monitor has a unique address and that the remote control is able to determine each appliance's current power based on the data received from each power monitor; thus each power monitor's signal must include the power monitor's address along with the associated appliance's current power state.

Regarding claims 3, 17, and 31, in Col. 12, lines 51-54 and 61-65, the patentee claims that the control device transmits discrete and toggle power commands (i.e., command codes that directly affect an appliance's power state).

Regarding claims 5, 9, 19, 23, 33, and 37, the patentee is silent on the control device automatically transmitting a command code from each command code set until receiving a signal from the power monitor (as called for in claims 5, 9, 19, 23, 33, and 37) in response to a manual interaction (as called for in claims 9, 23, and 37).

Kamon, as shown in Fig. 7, teaches that in response to SET key 2c being pushed at S101 (i.e., manual interaction), the remote controller automatically transmits a command code from each command signal group (i.e., command code set) until (1) it receives a signal from operation detecting circuit 10 or (2) all of the command code sets have been exhausted (see Col. 7, lines 1-20, 39-47, and 59-67).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system claimed in US 6,642,852 as taught by Kamon because a remote controller that automatically transmits a command code from each command code set until it receives a signal from the power monitor allows a user to select and set a preset command code group with a minimum number of simple key strokes without the hassle of monitoring constantly the appliance's power state and checking the appliance's manufacturer and model (see Kamon, Col. 2, lines 31-46).

Regarding claims 6, 10, 20, 24, 34, and 38, the patentee claims in Col. 12, lines 19-22, that the control device transmits one or more commands selected from the library to each appliance; hence the one or more commands for controlling each appliance is understood to form a command code set that is used to control one type of appliance.

Regarding claims 7, 11, 21, 25, 35, and 39, the patentee claims in Col. 12, lines 26-29, that the control device accepts input for associating commands with each of the plurality of appliances; thus the type of each appliance, which is indicated by the commands, is user-designated.

Regarding claims 8, 12, 22, 26, 36, and 40, the patentee omits claiming that the command code from each command code set is transmitted in "an order reflective of an install base of the one type of appliance." As explained on page 24, lines 16-20 of the applicant's specification, "the order in which the commands are selected for transmission from the command sets may be predetermined...as a function of the installed base of consumer equipment...such that commands for commanding operations of more popular devices are transmitted first." Thus the claims are understood to call for a control device that transmits command codes from each command code set, wherein the commands code sets are selected in an order based on the popularity of the appliances.

Kamon teaches that the command signal groups are arranged in outputting order that is determined in accordance with the degrees of spread (i.e., popularity) of the appliances (see Fig. 3 and Col. 5, lines 52-62).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system claimed in US 6,642,852 as taught by Kamon because a remote controller that automatically transmits a command code from each command code set, wherein the command code sets are in order based on the popularity of each appliance, will reduce the duration of the setup mode for the more popular appliances.

Regarding claims 13, 27, 41, and 42, the patentee claims in Col. 12, lines 22-24 and 30-34 a remote control device having a third wireless communication module for exchanging (i.e.,

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transmitting and receiving) communications with a power monitor, which has a first wireless module (see Col. 12, lines 17-18), as called for in claim 41. In Col. 12, lines 7-9, the patentee claims that the first and third wireless communication modules comprise radio frequency (RF) communication modules.

Regarding claims 14, 28, and 43, the patentee claims in Col. 12, lines 10-12 that the second wireless communication module comprises an infrared (IR) communication module.

4. Claims 4, 18, and 32 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 10, 12, and 13 of U.S. Patent No. 6,642,852 in view of Kamon et al. (US 5,726,645), as applied to claims 1, 15, and 29 above, and in further view of Yamamoto (US 5,097,249).

Regarding claims 4, 18, and 32, the patentee and Kamon are silent on the remote controller transmitting a command code that indirectly affects a power state of the appliance.

In an analogous art, Yamamoto teaches a power status detecting apparatus. As shown in Fig. 1, Yamamoto's system comprises: (a) power status detecting apparatus 11 and power table tap 9 forming a power monitor and having circuitry for determining a current power state of an appliance and receiving portion 11A (i.e., a first wireless communication module) (see Fig. 3; Col. 3, lines 19-25 and 41-60; and Col. 4, lines 6-22); and (b) system control apparatus 12 having a library of command code sets, transmitting portion 13 (i.e., second wireless communication module) for transmitting a command code to an apparatus, and a communication module for receiving communication from power status detecting apparatus 11 (see Col. 3, lines 40-43; Col. 5, lines 63-68; and Col. 6, lines 1-6). Yamamoto teaches transmitting command codes that indirectly affect the power state of an apparatus (see Col. 1, lines 42-53). In one example, Yamamoto discloses that when a command code for changing over the input of

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main amplifier 6 to the CD player is transmitted to selector 5, system control apparatus 12 transmits a command code to television tuner 2 via transmitting portion 13 to turn off if system control apparatus 12 detects that television tuner 2 is in the ON state (see Col. 5, lines 63-68 and Col. 6, lines 1-6). Other examples are found in Col. 8, lines 42-61 and Col. 9, lines 1-8.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system and method of the patentee and Kamon as taught by Yamamoto because a control device transmitting a command code that indirectly affects a power state of an appliance ensures that all necessary system components are turned on while the unnecessary components are turned off when a user selects a particular function/operation on the remote controller (see Yamamoto, Col. 1, lines 42-53).

5. Applicant is advised that should claims 9-12 be found allowable, claims 37-40 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 3, 5, 6, 8-10, 12-15, 17, 19, 20, 22-24, 26-29, 31, 33, 34, 36-38, 40, and 41-43 are rejected under 35 U.S.C. 102(b) as being anticipated by Kamon et al. (US 5,726,645).

Referring to claims 1, 29, and 41, claims 29 and 41 call for a control device that is substantially similar to the one claimed in claim 1. As shown in Fig. 6, Kamon teaches a remote control system comprising: (a) operation detecting circuit 10 (i.e., a power monitor) associated with appliance 20, wherein operation detecting circuit 10 has circuitry for determining appliance 20's current power state and transmission portion 10b (i.e., first wireless communication module) for transmitting information to a remote controller (see Col. 4, lines 65-67 and Col. 5, lines 1-3 and 9-22); (b) a remote controller having (1) preset data of command codes (i.e., library of command code sets) employing various formats and code systems associated with respective electronic devices categorized according to the manufacturers and types thereof, (2) light emitting portion 1 (i.e., a second wireless communication module) for transmitting a command code to appliance 20, and (3) receiving portion 11 (i.e., a third wireless communication module) for receiving a signal from operation detecting circuit 10 (see Figs. 4 and 5; Col. 3, lines 42-47; Col. 4, lines 34-54 and 65-67; and Col. 5, lines 1-3 and 37-40); and (c) wherein the remote controller has setup mode programming (see Fig. 7) that includes the steps of (1) light emitting portion 1 transmitting a command code from a command signal group to appliance 20 at S104, (2) receiving portion 11 receiving a signal from operation detecting circuit 10 that indicates that the transmitted command code caused a change in appliance 20's current power state at S105, and (3) control portion 4 selecting and storing the command code set that includes the command code to which appliance 20 responded by changing power state at S109 (see Col. 5, lines 37-40; Col. 6, lines 36-67; and Col. 7, lines 39-47).

Referring to claim 15, Kamon's setup mode, as shown in Fig. 7, comprises: (a) light emitting portion 1 transmitting a command code from a command signal group to appliance 20 at S104 (see Col. 6, lines 36-51); (b) control portion 4 determining if a signal is received from

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operation detecting circuit 10 that is associated with appliance 20, wherein the signal indicates that operation detecting circuit 10 detected a change in appliance 20's current power state due to the command code at S106 (see Col. 6, lines 59-65 and Col. 7, lines 39-47); (c) in response receipt of a signal from operation detecting circuit 10, control portion 4 using the command signal group associated with the command code to which appliance 20 responded by changing power states as the command signal group for commanding operations of appliance 20 at S109 (see Col. 5, lines 52-62; Col. 6, lines 3-13; and Col. 7, lines 39-47); and (d) in response receipt of an absence of a signal from operation detecting circuit 10, control portion transmitting a command code selected from the next command signal group, if any, and repeating steps (b)-(d) at S107 (see Col. 7, lines 1-13 and 29-38).

Regarding claims 3, 17, and 31, Kamon teaches that the remote controller has a power supply key (PW key 2a) for turning a power supply on and off (see Col. 3, lines 58-59). Kamon adds that the power supply of appliance 20 is turned on or off depending on its previous state in response to the power supply on/off switching command signals (see Col. 5, lines 63-67 and Col. 1, lines 1-2); hence Kamon's command codes directly affect the power state of an appliance.

Regarding claims 5, 9, 19, 23, 33, and 37, per Kamon, after it determines that the SET key 2c has been pushed at S101 (as called for in claims 9, 23, and 37), the remote controller automatically transmits a command code from each command signal group until receiving a signal from operation detecting circuit 10 (see Fig. 7, S106, S107, and S108 and Col. 7, lines 1-13 and 59-67), as called for in claims 5, 9, 19, 23, 33, and 37.

Regarding claims 6, 10, 20, 24, 34, and 38, Kamon expresses that the remote controller has a read-only memory ROM 7 for storing a plurality of command signal groups employing various formats associated with respective electronic appliances categorized according to

manufacturers and types thereof (see Col. 4, lines 34-38); thus each command signal group commands one type of appliance.

Regarding claims 8, 12, 22, 26, 36, and 40, Kamon teaches that the command signal groups are arranged in outputting order that is determined in accordance with the degrees of spread (i.e., popularity) of the appliances (see Fig. 3 and Col. 5, lines 52-62).

Regarding claims 13, 27, and 42, Kamon teaches that operation detecting circuit 10's transmission portion 10b transmits its signal by means of electric wave (i.e., radio frequency) or IR rays and that the remote controller's receiving portion 11 (i.e., third communication module) receives the signal (see Col. 4, lines 65-67 and Col. 5, lines 1-7 and 18-22).

Regarding claims 14, 28, and 43, Kamon teaches that remote controller's receiving portion 11 (i.e., a third wireless communication module) is an IR receiver (see Col. 4, lines 65-67 and Col. 5, lines 1-3).

Regarding claims 14, 28, and 43, Kamon's remote controller has light emitting portion 1 (i.e., a second wireless communication module) for transmitting a command code via IR frequency to appliance 20 (as called for in claims 14, 28, and 43), and receiving portion 11 (i.e., a third wireless communication module) for receiving a signal from operation detecting circuit 10's transmission portion 10b (see Figs. 4 and 5; Col. 3, lines 42-47; Col. 4, lines 65-67; and Col. 5, lines 1-7 and 37-40), as called for in claim 41.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claims 2, 16, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kamon et al. (US 5,726,645) as applied to claims 1, 15, and 29 above, and further in view of Nakazawa et al. (US 6,297,746).

Regarding claims 2, 16, and 30, Kamon fails to teach that operation detecting circuit 10's signal includes the operation detecting circuit 10's address in addition to appliance 20's current power state.

In an analogous art, Nakazawa teaches a centralized apparatus control system, as shown in Fig. 1, comprising: (a) a plurality of terminals 200, wherein each terminal 200 (i.e., power monitor) is associated with an electrical apparatus (such as a television set, videocassette recorder, etc.) and has microcomputer 30 for determining the current power state of its associated apparatus and radio transmitter-receiver 32 (i.e., a first wireless communication module) for transmitting the current power state of the apparatus (see Fig. 4; Col. 10, lines 41-51; and Col. 11, lines 2-15); and (b) host unit 100 (i.e., control device) having EEPROM 18 for storing a library of command code sets for each apparatus that is provided with an expanded

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function (see Col. 22, lines 24-34 and 48-55; and Col. 23, lines 10-28) and radio transmitter-receiver 20, which has a transmitter (i.e., a second wireless communication module) for transmitting a command code to an apparatus via terminal 200 and a receiver (i.e., a third wireless communication module for receiving a signal indicating the current power state of an apparatus from terminal 200 (see Fig. 2; Col. 9, lines 36-39 and 47-67; Col. 10, lines 26-29; and Col. 11, lines 7-15). Per Nakazawa, terminal 200 transmits its identification (ID) code along with the current power state of its associated apparatus to host unit 100 (see Col. 11, lines 7-15).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system and method of Kamon as taught by Nakazawa because an operation detecting circuit 10 that transmits its address in addition to appliance 20's current power state enables the remote controller to (1) verify that the transmitted command code caused the desired appliance 20's power state instead of another appliance's power state to change and (2) easily identify any operation detecting circuits 10 that have malfunctioned (see Nakazawa, Col. 3, lines 49-54).

11. Claims 4, 18, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kamon et al. (US 5,726,645) as applied to claims 1, 15, and 29 above, and further in view of Yamamoto (US 5,097,249).

Regarding claims 4, 18, and 32, Kamon is silent on the remote controller transmitting a command code that indirectly affects a power state of the appliance.

In an analogous art, Yamamoto teaches a power status detecting apparatus. As shown in Fig. 1, Yamamoto's system comprises: (a) power status detecting apparatus 11 and power table tap 9 forming a power monitor and having circuitry for determining a current power state of an appliance and receiving portion 11A (i.e., a first wireless communication module) (see Fig.

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3; Col. 3, lines 19-25 and 41-60; and Col. 4, lines 6-22); and (b) system control apparatus 12 having a library of command code sets, transmitting portion 13 (i.e., second wireless communication module) for transmitting a command code to an apparatus, and a communication module for receiving communication from power status detecting apparatus 11 (see Col. 3, lines 40-43; Col. 5, lines 63-68; and Col. 6, lines 1-6). Yamamoto teaches transmitting command codes that indirectly affect the power state of an apparatus (see Col. 1, lines 42-53). In one example, Yamamoto discloses that when a command code for changing over the input of main amplifier 6 to the CD player is transmitted to selector 5, system control apparatus 12 transmits a command code to television tuner 2 via transmitting portion 13 to turn off if system control apparatus 12 detects that television tuner 2 is in the ON state (see Col. 5, lines 63-68 and Col. 6, lines 1-6). Other examples are found in Col. 8, lines 42-61 and Col. 9, lines 1-8.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system and method of Kamon as taught by Yamamoto because a remote controller transmitting a command code that indirectly affects a power state of an appliance ensures that all necessary system components are turned on while the unnecessary components are turned off when a user selects a particular function/operation on the remote controller (see Yamamoto, Col. 1, lines 42-53).

12. Claims 7, 11, 21, 25, 35, and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kamon et al. (US 5,726,645) as applied to claims 1, 15, and 41 above, and further in view of Chiloyan et al. (US 6,008,735).

Regarding claims 7, 11, 21, 25, 35, and 39, Kamon fails to teach that the user is able to designate the appliance's type.

In an analogous art, Chiloyan's method and system for programming a remote control unit. Chiloyan's system includes a remote control unit having: (a) database 16 (i.e., library of command code sets) of code sets associated with various types and brands of devices (see Col. 4, lines 29-32); and (b) transmitter 18 (i.e., a wireless communication module) for transmitting signals from the remote control unit to a receiver 30 associated with one of a plurality of controllable devices 28a (see Fig. 1 and Col. 4, lines 40-48). As shown in Figs. 3A-3M and Fig. 5, Chiloyan's method includes the step of a user selecting device type and brand at steps 105 and 110 respectively (see Figs. 3C and 3D; Col. 6, lines 33-56 and Col. 10, lines 25-31).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system and method of Kamon as taught by Chiloyan because a remote controller having menus of available device types and brands provides a user the option to manually identify the correct code set for a device while minimizing/eliminating the need for the user to use an instruction manual and the occurrence of error in the set-up process (see Chiloyan, Col. 2, lines 3-6 and 16-20).

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- Ivie et al. (US 5,815,086) teach an automated appliance control system comprising a power monitor coupled to an appliance for determining the appliance's current power state.
- Johns et al. (US 6,157,319) teach a remote control system wherein the remote control unit transmits different power commands until it determines that the appliance has responded to a specific power command.
- McGrane et al. (US 6,496,927) teach a remote control system that is able to determine if a controlled appliance responds to discrete power commands or toggle power commands.

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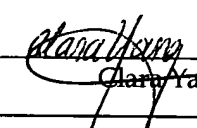
- Dresti et al. (US 6,870,463) teach a remote control system having power awareness of a controlled appliance.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clara Yang whose telephone number is (571) 272-3062. The examiner can normally be reached on 8:30 AM - 7:00 PM, Monday - Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik can be reached on (571) 272-3068. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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